



Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

DEPARTMENT OF NATURAL RESOURCES

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JAN 30 2013

CERTIFIED MAIL # 7007 3020 0003 2221 1266
RETURN RECEIPT REQUESTED

Mr. Craig Almanza
Bridgeton Landfill, LLC
13570 St. Charles Rock Road
Bridgeton, MO 63044

RE: Bridgeton Sanitary Landfill, Permit Number 118912, August 2012 Air Monitoring Event

Dear Mr. Almanza:

The Solid Waste Management Program (SWMP), working with staff from the Air Pollution Control Program and the Missouri Department of Health and Senior Services, have reviewed the August 2012 air sampling summary report and analytical data produced by Stantec, a professional consulting company hired by Republic Services, Inc. Stantec conducted air monitoring at the Bridgeton Sanitary Landfill on August 16-17, 2012. The SWMP staff were on-site to observe the sampling event. The event was intended to characterize byproducts generated by the ongoing subsurface smoldering event (SSE) and to determine what air emission impacts, if any, there may be within the boundaries of the permitted facility or to the surrounding community.

The SWMP cannot concur with the findings in the Stantec report in their entirety. The SWMP determined that a number of compounds should be re-sampled to ensure conditions at the site are accurately characterized due to problems encountered during sampling and analysis. Therefore, the SWMP disagrees that the results definitively demonstrate the SSE is not producing emissions that have or will have the potential to increase and cause health concerns for people working on the landfill or members of the surrounding community.

From our review of the report and field observations, the following actions are warranted given present conditions at the permitted facility:

Sampling

1. Due to the concentrations of acetaldehyde and benzene exceeding their respective EPA Regional Screening Levels (RSLs), conduct a site-specific analysis or modeling to determine if nearby populations are being exposed to concentrations of acetaldehyde or benzene which exceed their respective EPA RSLs. This should include conducting additional monitoring of both aldehydes and volatile organic compounds (VOCs) such as benzene. We recommend



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samples be collected on the landfill and downwind over a period of several weeks, with particular emphasis towards areas where work on the landfill infrastructure is being conducted, i.e., drilling of wells, replacement of old leachate sumps and nearby off-site occupied buildings.

Resampling Needed

2. Re-sample for:

- carbon monoxide upwind, downwind, on-site, and under the flexible membrane liner (FML) with care to prevent over-inflation of the sample bags and with method reporting limits (MRLs) established that are appropriate and sensitive for the screening values of the sample.
- hydrogen cyanide upwind, downwind, on-site, and under the FML with MRLs established that are appropriate and sensitive for the screening values of the sample and process the samples within the required hold time.
- acetone, methyl-ethyl ketone, and tetrahydrofuran under the FML to assess if any of these compounds' concentrations are such that they could present a potential risk to on-site workers if they were released.
- acrolin and acrylonitrile under the FML, using MRLs that are capable of detecting these compounds at the PEL.
- dioxins/furans under the FML with a method that is not impacted by high-moisture or a method that can remove moisture from the sample to ensure an adequate and quantifiable volume of air sample may flow through the sample cartridge to accurately measure the concentrations of these compounds.
- PAHs under the FML with a method that is not impacted by high-moisture or a method that can remove moisture from the sample to ensure an adequate and quantifiable volume of air sample may flow through the sample cartridge to accurately measure the concentrations of these compounds.
- reduced sulfur compounds upwind, downwind, on-site, and under the FML, taking care to prevent over-inflation of the sample bags. Establish an MRL capable of detecting hydrogen sulfide at the RSL (for upwind/downwind samples). Determine if any appropriate screening levels can be established for other reduced sulfur compounds. Compare the sample results to these screening values.

Conditions have continued to change at the landfill since the monitoring event took place. The area impacted by the SSE has grown as demonstrated by rapid settlement, temperatures at additional gas extraction well-heads rising and through other indicators that show the event is likely intensifying. Due to the nature of these changes and the concentrations of certain compounds collected from beneath the FML, it is in the best interest of the surrounding community that additional monitoring and certain actions occur to assist in determining and minimizing the potential for on-site or off-site impacts that might adversely affect worker safety or community members. We also encourage you to work with your employees and contractors to ensure appropriate personal protective equipment is made available to them on-site and that you continue to stay in frequent contact with residents and businesses near the facility.

Mr. Craig Almanza
Bridgeton Sanitary Landfill
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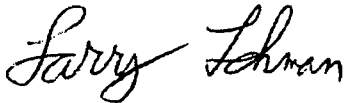
It is our understanding from meetings and discussions that Bridgeton/Republic Services has committed to taking and continuing to take steps to further control emissions from the landfill. We encourage you to continue implementing necessary emission control measures to minimize public impacts. The steps implemented for air emissions control that we are aware of include: adding capacity to the gas extraction system including an enhanced blower skid and the addition of significant quantities of soil and/or FML to the landfill cap. We understand in coming weeks you will continue to add soil and FML to assist with odor control. Additionally, we understand you are currently evaluating capping the entire South Quarry area with an FML system.

We request you share proposed sampling dates with the SWMP as soon as possible for the re-sampling of the parameters identified above as we would like to once again observe the monitoring event. Air monitoring is recommended while you are drilling new wells or replacing the out-of-date leachate collection wells. This should establish the maximum amount of odors/emissions that may be released during such activities and provides data for evaluation of any impact to human health and safety. Additionally, we request for all sampling that a copy of all results be provided to the Metropolitan St. Louis Sewer District and St. Louis County Department of Health as well as the Solid Waste Management Program to encourage the exchange of air monitoring information with parties that have an interest in this data.

If you have any questions concerning this letter, please contact Ms. Cecilia Campbell by telephone at (573) 751-5401 or in care of the SWMP at P.O. Box 176, Jefferson City, Missouri, 65102-0176. Thank you for your continued efforts to resolve this matter.

Sincerely,

SOLID WASTE MANAGEMENT PROGRAM



Larry Lehman
Compliance/Enforcement Section Chief

LL/ccj

c: Mr. Jim Teter, Republic Services, Inc.
Mr. Clarke Lundell, Republic Services, Inc.
Dr. Delores J. Gunn, St. Louis County Department of Health
Ms. Nora Estopare, Metropolitan St. Louis Sewer District
Mr. Jonathan Garoutte, Department of Health and Senior Services
Mr. David Lamb, Hazardous Waste Program
Ms. Kyra Moore, Air Pollution Control Program
St. Louis Regional Office